

# WACO WARRABLINGS

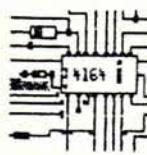
WARRENSBURG/WHITEHORN ATARI COMPUTER OWNERS NEWSLETTER VOL 02 # 8 October 1987

H.A.C.O. P.O. BOX 199, WARRENSBURG, MO 64093

Les Lynam, editor (?)

## BEGINNING BASIC

Beginning BASIC  
by Keith Hansen



10 FOR ARTICLE=1 TO AS MANY AS CAN WRITE

One of the biggest complaints almost every BASIC programmer has against Atari BASIC is its lack of two dimensional strings. Before I get into this in depth, let me define my terms. First, a string. A string is simply a group of alphanumeric characters such as "I .here" or "September 15, 1987". Strings can be assigned variable names, such as A\$, or NAME\$. (in Atari BASIC they can have long descriptive names. Most BASIC's limit variable names to a maximum of three characters), i.e. A\$="September 15, 1987". In Atari BASIC, before such an assignment can be made, the string must be DIMensioned. This means room in the computer's memory must be reserved for the string. The command is DIM. For example, DIM A\$(10). So the string is DIMensioned to give it enough room to hold whatever data you want to put in it. In most BASIC's you can do this in two dimensions, i.e. DIM A\$(10,10). What this means is you've built a matrix for your string which is 10 by 10, or that holds 100 cells for string input. Each string is limited to 255 characters. In Atari BASIC you can't do that. A\$ can only be one string. However its length is limited only by the memory you have available in your computer and program. Technically you could have a string with up to 32,000 characters in it. That's a lot. Many BASIC programmers use this capability to imbed machine language routines in long strings using Atari's special characters,

## NOVEMBER



## ELECTIONS

I know, it's really hard to get too excited about elections in an off-year, but we do have elections coming up fast. We will take nominations at the October meeting for the offices of: President, Vice-President, Secretary, Treasurer, 8-bit librarian, 16-bit lib. Brian (new). I would also like to thank those who have served this past year. First, I want to thank Keith Hansen for handling some of the extra correspondence that we have gotten since our name appeared in ANALOG, ST-Lab, and Computer Shopper all in the same month, although he really needs thanked for the job he has done this past year with the newsletter and Bulletin Board. Both of those are non-elected positions, that he has had to devote a lot of time to for very little glory. Thanks, Keith, you're a backbone member of this club.

Also thanks to Linda Medaris for doing a marvelous job watchdogging the few dollars that we have as a club, you wouldn't believe how many times she told me, "We don't have enough money!" (By the way, those of you who haven't paid your dues in September....) We never went into the hole, and we seemed to make it through in fine shape, paying for postage, newsletters and phone bills for the BBS. Thank you, Linda!

The libraries did some shuffling this year. We had decided to have two copies of the 8-bit library, one for Warrensburg and one for Whiteman RFB. However, Roger Dunning sold his 8-bit stuff and bought an ST, so we decided it was high time to have an official ST PO library, and Roger was installed to head it up. In the meantime, Marc LeBeau and

especially for games. But that's not what I want to talk about here. What I want to discuss is how to fake a two dimension string in Atari BASIC.

The technique for adding strings together in Atari BASIC is concatenation. In most BASIC's you just state "`C$=A$+B$`". This doesn't work in Atari BASIC. If you want to combine `A$` and `B$` you would have to do something like this: (Always assuming you've DIMensioned `A$` long enough to hold `A$` and `B$`)

```
100 A$(LEN(A$)+1)=B$
```

`LEN(STRINGNAME$)` gives the mathematical length of the `STRINGNAME$`. If `A$` was "September 15, 1987" then `LEN(A$)` would be 18. You're telling the computer to tack `B$` onto `A$` in the position which is one more than the length of `A$`. Let's look at an example.

```
10 DIM A$(27),B$(14)
20 A$="HELLO THERE, "
30 B$="MY NAME IS JOE"
40 A$(LEN(A$)+1)=B$
50 PRINT A$
```

You should get "HELLO THERE, MY NAME IS JOE" when you run this little program. It looks like you should get "HELLO THERE, M". After all, you just added one character with `A$(LEN(A$)+1)`, right? Looks like it, but it's not. When you throw in that "+1" it tacks all of `B$` onto `A$`.

So, we can add strings together in Atari BASIC. How does this help fake a two dimensional string? In a standard BASIC, a two dimensional string allows you to assign substrings to matrix positions. "John Doe" might be `A$(1,1)`, "2110 Wire Ave." might be `A$(1,2)`. This doesn't represent their linear placement in the string, but rather their row and column placement in the string matrix, each row and column location being able to hold a 255 character string. The same data in an Atari BASIC string would have to be represented in a linear fashion. The string would have to be put together like this: `A$="JOHN DOE2110 WIRE AVE"`. `A$(1,2)` would be "JOHN DOE". The "1" is the starting position in the string and the "2" is the last character you want to read. `A$(9,21)` will be "2110 WIRE AVE". All you do is count the letters till you find the start and end of the substring you want. The problem is that every substring is going to be a different

length. Do you have to print the whole substring (which could be up to 32,000 characters, remember) and then count the lengths of all the substrings in order to retrieve a certain substring? There's an easier way. Let's write a little database program to explore how this is done.

```
10 DIM INFO$(100),TEMP$(10),BLANK$(10)
```

Here I've DIMensioned `INFO$` to be 100 characters long. I'll hold my database information in it. I'll use `TEMP$` for each individual entry of data. I need `BLANK$` to make each entry the same length.

```
20 BLANK$=""
":BLANK$(10)=BLANK$:BLANK$(2)=BLANK$
```

I've made `BLANK$` just that; blank. Now I can use it to "pad" the data that's input to make it 10 characters in length so it will neatly fit `INFO$`.

```
30 FOR LOOP=1 TO 10
40 INPUT TEMP$
50 LENGTH=LEN(TEMP$)
```

I'm allowing 10 items of data input with the `FOR` line, asking for `TEMP$` each time. Then I've asked the computer for the length of `TEMP$` and assigned it to the variable `LENGTH` (You can't use `LEN` as a variable name. It's "reserved" by the computer for the `LEN` statement.)

```
60 IF LENGTH<10 THEN TEMP$(LENGTH+1)=BLANK$
```

Line 60 looks at the length of your temporary string. If it's less than 10 characters long it adds `BLANK$` to it. `BLANK$` is blanks! This will pad your substring with blanks so it fits the format you want in `INFO$`; i.e. 10 character substrings.

```
70 LOCATION=(LOOP-1)*10+1
```

The `LOCATION` is the number we'll need to tell the computer where in `INFO$` to put `TEMP$`. If `LOOP=1` then `LOOP-1` is 0, making 10 times it equal 0 and adding one to it makes it 1. Your first substring will start at position one in `INFO$`. Use 2 for the second loop and you get  $(2-1)*10+1$ , or 11! So the second substring will start at position 11. It will also erase any blanks from `BLANK$` which were in position 11 and on from `INFO$`.

Continued on next page

80 INFO\$(LOCATION)=TEMP\$

Line 80 actually adds the temporary string data into the main string at the position you specified with LOCATION.

90 TEMP\$=" "

You need to blank out the TEMP\$ so you can put new data into it.

100 NEXT LOOP

And you start the second loop. If you want to print the data to screen or printer you'd use a variation of the input program.

```
200 FOR LOOP=1 TO 10
210 LOCATION=(LOOP-1)*10+1
220 PRINT INFO$(LOCATION,LOCATION+9)
230 NEXT LOOP
```

Note that the second "LOCATION" must be one less than the desired length of your substring; in this case, nine.

Or you can just put:

200 PRINT INFO\$

And there you have it. You can change the length of your substrings by changing all occurrences of the number 10 to whatever you want it to be. Be sure to change the length of your main string to a multiple of your substring length and make it long enough to put your data into. Run this program and put the following information in: John, Mike, Pete, Larry, Moe, Curly, Steve, George, Dino, and 1234567890. Then INFO\$ should look like this: "John Mike Pete Larry Moe Curly Steve George Dino 1234567890", with each substring taking up exactly 10 spaces within the main string. If you enter a substring which is more than 10 characters long, anything past the 10th character will be erased.

That's great, isn't it? We've overcome a deficiency in Atari BASIC. Now we can build data input routines and save all the information to a single string. The next question is, once we've got all this data into the string, how do we search for it to get it out? If we have an extremely long string loaded with data, we don't want to have to print the whole thing to get one piece of information. So it's a good question. How will we do that?

FIND OUT NEXT TIME!

20 NEXT ARTICLE

## ELECTIONS (from page 1)

I tried to whip up a better system for the 8-bit stuff. Marc has been working hard to get the 8-bit PD library in shape, and has been getting some new stuff to put into it. Thanks a bunch librarians Roger and Marc!

Our V-P done split on us. Well, it wasn't really his fault, I guess when Uncle Sam says "Go to Korea", you go to Korea! Just before leaving, Steve was very active in getting the ST people on Base to come to club meetings. Steve also did all the ST demos we had this year and he also cooked all the hamburgers at the May picnic/meeting. Thanks, Steve! Hope you have good luck finding other Atarians in Korea!

Now, don't you want to be thanked next year??? THEN BE AN OFFICER!!! Seriously folks, this club needs people to be involved. If you don't want to help, we can just let it fold up and blow away. When two or three people are all that make a club go year after year, the club is destined to fold. Two key people left the local Commodore club this past year. Their club was four times bigger than ours. They shut down their BBS, they stopped publishing a newsletter, and as best I can tell, they don't have regular meetings any more. The same thing could happen to us, if people don't volunteer to do stuff with the club.

I already mentioned that the past VP has left. Marc LeBeau is graduating in December and will be moving to KC. He says he still wants to come to meetings, but it would be pretty hard for him to continue as 8-bit librarian from that distance. I have finished my Masters Degree and am actively seeking employment that will take me out of this area. If you care to keep this club alive, you need to be willing to put some time into it. And don't give me the I'm too busy line. I worked a full-time job, commuted 200 miles round-trip to school and was still President of this outfit, and I guarantee I was too busy. Not qualified? Marc had never been a disk librarian before, Linda had never been a treasurer before, they did it and they did fine. Other members will help you out if you ask for help. I don't want to see this club cease to exist just because I or Keith or someone that has been actively involved move away. Please become an active part of this club, and help it to stay active.

# GAME REVIEW



XAGON  
Game: 8-bit  
D. Pentecost

An all-machine language game, XAGON is of exceptional quality. It's design is similar to "Q-Bert"; i.e. you bounce around on hexagons avoiding the bad guys and collecting points. There are several differences that make it a worthwhile addition to your games library. First, you don't have a static, unchanging pyramid. These three dimensional hexagons are grouped differently and are different colors every screen, and they move! Up and down. You start with a certain amount of bonus points and you leap about trying to drive the hexagons down so they're all at the same level. They don't go down and stay down the first time you jump on them either. Sometimes you really have to pound on them. You also have to avoid ball-like bad guys and collect the money bags which pop up randomly. They don't stay up long. The bad guys also randomly sink into the hexagons and reappear elsewhere. The surface of the hexagon where they're going to reappear changes, so you know which ones to avoid as you madly bounce around. The reason you're bouncing madly is that your bonus points are disappearing! The faster you get that screen all tamped down, the more points you get. At higher levels you get different bad guys; they look like aliens. Then there's that \*\$%&"! balloon that floats around following you with a malevolent intelligence.... Touch one and you're dead. You and every other bad guy, except this balloon, are pretty much restricted by the pattern of the hexagons. The balloon apparently isn't; making it really tough to get away from! Plus these double triangles appear (three dimensional also) and bounce around too. First one, then two. Possibly more, but I haven't gotten to a high enough level to find out. If you hit them you're sent to a random square. Potentially disastrous if one of the bad guys hits that square at the same time. You can get extra men by getting these funny money bags that look like they're boiling. There's a "high score" screen for the top five scores and names, but you can't store them to disk. At higher levels some of the hexagon surfaces have pulsing patterns on them. If you land-

▼

on one of them you get randomly teleported again! In this game you've got to be fast, true; but you have to plan your route too. The baddies (except the balloon) bounce randomly and once you're airborne you can't change directions, so if you guessed wrong about the way an alien was going to go...too late!

The graphics, speed and playability of this game are really quite good. Granted it's not a new idea, but the execution is excellent, with enough challenges to keep you wrestling with your joystick for a long time. Best of all, it's FREE! That's right; this is a Public Domain game from MACE. Not the Michigan Atari Computer Enthusiasts, but the MELBOURNE (as in Australia!) Atari Computer Enthusiasts! Credit is given to "D. Pentecost" in the opening screen. This is a good one, folks. Get it.

## WHAT'S IN IT FOR ME?

by Marc LeBeau

It's not an often heard question, but I'm not sure it's in your mind more than you may want to believe. You ask yourself this when someone asks you to take some of their hours at work so they may go to their child's ballgame. Or when someone asks you to jump-start their car for them, it sometime passes into your mind. Or even when your club President begs you to do a demo at the next meeting or write an article for the newsletter, the thought crosses your mind -

What's in it for me?

Well, finally you can rest easy because I assure you that you will get something for everything you do! (Well, maybe not for everything in life, but it sure would be fun if it were that way!)

If you've read Les's article you understand what I'm getting at. We are now incorporating a point-system into the club to reward those that put forth an effort to help our club survive. (See Les's article for details.) So now you need not worry when that little thought enters your mind because it will quickly be answered by a second thought - free disks!



What's the Point???

by Les Lynam

Let's talk about points. No, I don't want to know what your high score on "Gamma Mutant Penguins from Rigel 3" is! POINTS! No, not the thing at the top of the head of the guy that thinks Atari only makes game machines! POINTS!! OK, I get your point, the word point may bring to mind several things. Such as something you use to buy food with at the local University, or what the seller is loathe to pay when you tell him you have a VA loan on his house, or what the local bookie says you'll have to give him 17 of to cover your bet on the football game. Gosh, you sure can use points for lots of different things! HMMMM... precisely my point (there I go again)!

Points can be used as nebulous little tally markers that can then be assigned a flexible real market value for something else (i.e.: an intermediary value to make bringing easier), thus ending such difficult trades such as 3 1/2 live goats for 1 cow. Well... enough lecture on economics... WHAT is my POINT????

I only wish that I could take full credit for this idea, but I happened upon it while reading the Pokey Press (official newsletter of the Atari Computer Club of the Palm Beaches). They got the idea from another club, whose name I don't recall and don't want to have to look up, but anyway it is a GREAT idea. It seems that many computer clubs have this problem of only a handful of people doing all of the work that keeps the club going, and they don't seem to benefit any more than those who aren't actively involved. Well how about giving those people POINTS??? Neat idea, you say? It will end the conflict between 8 and 16 bit owners, you say? NO???? OK, right, just having points won't make a whole lot of difference, I guess we are all past the point of putting stars on a chart for ever meeting that we attend. SO... there needs to be a payoff somewhere.

Here's the plan, and remember, since we are dealing with an artificial point market, we can adjust point levels later, if we find an imbalance. Some of the things that need to be rewarded, and suggested point levels given:

Serving as an officer.....	25
Original piece for newsletter.....	5
Type article from other newsletter...	3
Bring equipment to meeting.....	5
Bring guest to meeting.....	2
Sign up a new member.....	5
Donate new program to PD library....	3
Donate whole new disk to library....	10
Do a demo at a meeting.....	4

There are bound to be other things that I have overlooked, but that can do as a starter. Now, what can you get for your points?? Right now we can offer:

Blank 5 1/4" disks.....	5
PD disk (one side).....	12
PD disk (two sides).....	17
ST blank disk.....	12
ST PD disk.....	??

Since we don't have established prices for ST Public Domain disks yet, I had to leave that point value out, we will plug it in when we get it figured out.

As a review to those who want to know the current monetary values of the above, we are selling 5 1/4 floppies to members for \$5 per 10. Disk of the month and disks purchased from the public domain library are \$1.00 and \$1.50 for single sided and double sided respectively, 3 1/2" blank disks are \$1.25 each.

We hope that this point system will help to reward those that are actively helping out in the club, and also perhaps spur others on to getting more involved, when they see it can be of value to them.

Space...the final frontier...". How many of us remember when that was first on in the late 60's? If not, surely EVERYONE has at least seen Star Trek reruns. Or, how about the four Star Trek movies? Now, there is even a new series, "Star Trek: the next generation" with a new voice (Captain Picard) opening up the show with that same immortal phrase. OK, hold on, before you check the cover to see if you have accidentally gotten a Star Trek fanzine instead of your W.A.C.O. Wramblings, I'm getting there.

Before micros were popular, there was a very primitive game of Star Trek on mainframes and minis (I saw it on a mini) and there must be dozens of Star Treks for all the micros, mostly simulations written in BASIC. There is also a Star Trek game for the 8-bits that has something to do with you being in a trainer and hunting down Nomad (??). But the newest version of Star Trek is only for the Atari ST, and it is nothing short of incredible.

As many of you know, I don't presently own an ST, but I have seen this game, and was somewhat in awe. It opens with a digitized voice of William Shatner's famous intro to the old series as the rest of it loads. It also has digitized pictures of the bridge and individual portraits of the crew. It is truly a Trekkie's dream come true for a computer game, but it is also a game distributor's nightmare, for you see, this amazing game has not yet been released for sale, but has spread like wildfire across the country.

First let me applaud the "Pokey Press" of the Atari Computer Club of the Palm Beaches in their decision not to review a "hot copy" of this game. (They did get around this by printing a review, translated from French, of the game as it is already sold in Europe). The first I heard of this game was in the Michigan Atari Magazine, a very good and exciting review, and I do not mean to say that this CAUSED the wild distribution of this game but I must wonder if it didn't pour gas on the flame and set an unfortunate precedence. I have since seen other reviews extolling the wonders of this game, and saying it was OK to have it, because it was just a "BETA version". Excuse me folks, but Beta tests are supposed to be done by close friends of the programmer to help him get the bugs out, and NOT to be distributed to everybody and his dog to try. According to the Atari Journal, "...the heavy bootlegging has given Simon and Shuster, who will be marketing the game in this country, the idea that it may be pointless to even bring it out here. Hey, if everybody's already got it..." (quoted from the Pokey Press Sept. issue).

Simon and Shuster is a major player here, and if they get burned on this early venture into ST software, they may turn their backs on the machine forever! What I am saying here boils down to this, if you have a copy of Star Trek, or have seen it, drop a line to Simon & Shuster and tell them that

you think it is great, but you want to own a legal copy of it. Who knows, this may turn out to be a great new marketing technique, or it may add more credence to the claim that Atari owners are the worlds worst pirates.

Hmmm... I really didn't intend to go on all that long on that subject... oh well! Here we are at our second attempt to do this newsletter on the ST. It is really like starting over again. If any of you have seen the first few issues of the Wramblings and compare them to the last couple that Keith did, you will be amazed at the process. It will probably go through the same evolution again on the ST. Look for each issue to look a little bit better as we feel our way around with desktop publishing. Keith Jackson is getting a 24 pin printer, which we hope to use on future issues. That should put out some pretty good high resolution copy! It is sometimes hard to keep working on this newsletter, when we don't know if anyone even reads it. As Keith mentioned in his last issue as editor, no one ever says thank you. Well, maybe not locally, but I did get a very nice letter from Jack Weaver (editor of BUG News in Boise, ID): "Please tell Keith 'THANKS!!!' (include the emphasis) from one who considers the WRCO WRAMBLINGS to be best newsletter put out by any Atari users group (outside the State of Idaho, of course) we exchange with. No B.S., that's the truth. From my standpoint as strictly a computer user (as opposed to the more technically inclined, the ones who aren't afraid to perform major surgery on their computers or who have absolutely no qualms about tackling machine language programming,) I consider the WRAMBLINGS to be the most readable and appealing-to-diverse-interests newsletters in the Atari community. It's the only one I really look forward to getting every month. Tell him at least one reader appreciates his efforts." Wow!!! Thank YOU, Jack!! This letter came just shortly after we got the May/June issue of Eugene A.C.E. which announced that they were going to cut back on their exchanges with other clubs that just do reprints, and are little 2-page jobs stapled together. I was so sure that this was us, I almost fired an angry letter to ACE telling them that not all clubs have the resources or talents that they do, but that some of us are still trying hard anyway. I'm glad I didn't, because we did get an exchange from ACE this month, and though you may have to read between the lines, I consider that a pat on the head from one of the big boys and maybe a

"yeah, you guys are alright... for a dinky club."

Whew...still long winded! Also of interest: tentatively scheduled for the October meeting (Saturday, Oct. 24, 2pm in the CMSU library) is a demo of Magic Sac. AND...if all works well, we will have a MAC sitting beside it running the same software to compare how well it works on both machines! Sounds interesting, no? Also, there will be nomination of officers (See election article), 8-bit demos, and other great stuff, so BE THERE!

BBS question. Which would you rather see us do this year? 1. Change to a more reliable BBS program. 2. Add more storage for up/downloads. 3. Go for a 1200 baud modem. We may not have enough money to do any of them, but if we do, it would be nice to know what you club members think would be most beneficial to you.

We have added 3 1/2 inch disks to our wares. You can now buy them at meetings for \$1.25 each, along with our 5 1/4 inch disks for \$5/10 disks. We do want to do more to support STs, but you ST guys will have to keep us clued in as to what you want. Remember, not all of us know how to double click on an icon!

An interesting review of the Atari 1200 baud modem in this month's San Leandro Computer Club newsletter. I meant to type it up for this issue, but deadline is already upon me, and I am still writing this!

Soooo... I guess I'd better get this uploaded to the BBS now, forgive any misspelled words, I didn't have time to spell check this one. (Roger, do you have an ST spell checker?) See you next month.

Randomly yours,  
=====> Les Lynam \*\*\*



#### Late note addendum

Apologies to all who got this late and did not find out about the meeting. We tried to call everyone and set the word out, but if we missed you, we are sorry. Due to the library being unexpectedly closed due to maintenance work on campus, the meeting had to be moved to Linda Medaris's house. You might have also noted that this newsletter is not only late, but also not done on an ST. Due to circumstances beyond my control, we weren't able to set this done on the ST as planned, so at the last minute, I whipped it out on the 8-bit using Daisy-Dot (and scissors and glue). Don't know what we will do for next month, just watch your mailbox.

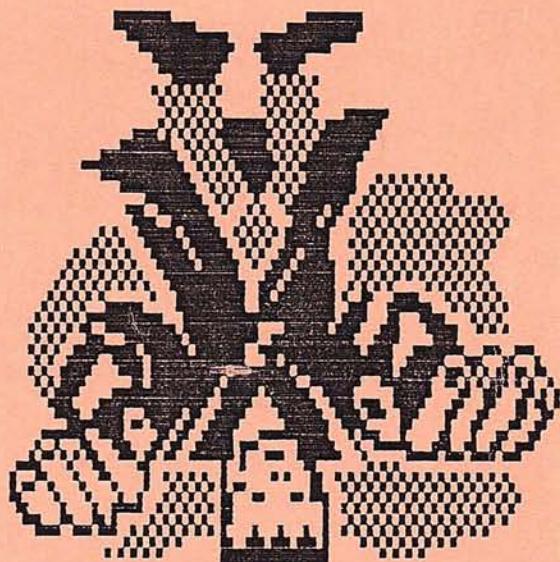
The November meeting will be on the 21st. This is the THIRD (3rd) Saturday rather than our normal fourth Saturday, due to Thanksgiving. This will be the meeting where we will elect our next year's officers, so PLEASE COME!!! Till next time...



SLCC NEWSLETTER SWAP  
P.O. BOX 1506  
SAN LEANDRO, CA 94577

FOR:

WRAMBLINGS  
W.A.C.O.  
OCTOBER



WARRIOR'S ALIVE LETTER LINES  
P.O. BOX 199  
MURFREESBORO, TN 37132

NOVEMBER MEETING WILL  
BE ON THE THIRD SATURDAY  
(THE 21ST) DUE TO THANKS-  
GIVING WEEKEND ON THE 28

2:00 PM, 2ND FLOOR  
AUDITORIUM CMSU LIBRARY

DEADLINE FOR NOV. NEWS-  
LETTER: NOVEMBER 7TH.

24 HOUR CLUB BBS  
(816) 747-3285